Gibsonville Project Cultural Resources Report and Effects Analysis

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The town of Gibsonville was founded in the 1850's and lasted as a town into the early twentieth century. Today this town is comprised of 74 archaeological features. In recent years especially since 2013 the Town of Gibsonville has been repeatedly vandalized and looted by unauthorized excavation. Features and artifact concentrations have been targeted resulting in removal of artifacts and destruction of intact archeological deposit. The persons conducting these actions are picking locations that are hidden due to vegetation.

Equipment will be used to thin vegetation between the 74 archaeological features and artifact concentrations. Vegetation will be removed within archaeological features if it can be removed by hand or by using equipment that will fully suspend vegetation so that no ground disturbance will occur. This work will follow the approved standard protection measures (Appendix E, 1.2 and 2.0) of the Programmatic Agreement among the U.S.D.A. Forest Service, Pacific Southwest Region (Region 5), the California State Historic Preservation Officer, the Nevada State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Processes for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forest of the Pacific Southwest Region (Regional PA 2013).

Direct effects: Under either alternative the direct effects to the archaeological site will be the same. Vegetation will be thinned to create an open forest so that it is possible to see across the site. Since the people performing the looting at Gibsonville appear to be targeting locations they believe they will not be seen it is believed that increased visibility across the site will lead to a decrease in unauthorized excavation. After completion of the project the site will be monitored to measure its effectiveness to detour looting. Monitoring will be carried out at minimum of once a year.

Another effect will be the removal on standing dead trees which pose a hazard to visitors and people camping on the site. The controlled felling of the standing dead trees will have less impact on the archaeological deposits of Gibsonville then if the trees were allowed to naturally fall. Controlled falling will directionally fall the trees away from archaeological features to prevent damage. When trees fall naturally the root-ball of the tree can be pulled out of the ground, pulling with it artifacts out of their associated deposit and damaging features; controlled falling of the standing dead trees will prevent this from happening.

Indirect effects: Studies have shown that fire can damage cultural resources; obsidian artifacts can lose hydration rings and can even melt, bone and wood artifacts can burn glass and ceramic artifacts can explode or melt. Metal artifacts can melt or fall apart (Solomon 2000 and 2002). The reduction of fuel loads on and around the archaeological site of Gibsonville will have a positive effect for archaeological resources through a reduced risk of high intensity wildfire.

Conclusion: Under either alternative the cultural resource of Gibsonville will move towards the desired condition of reduced damage due to looting, standing dead tree fall and wildfire. Also the public safety will be increased for visitors to the site by removal of standing dead trees.

Solomon, M.

2000 An Assessment of the Potential Effects to Obsidian Hydration Bands Caused by Prescribed Fires. *CDF Archaeological Reports* 26.

2002 Fire and Glass: Effects of Prescribed Burning on Obsidian Hydration Bands. In *The Effects of Fire and Heat on Obsidian*. Edited by J. M. Loyd, T. M. Origer and D. A. Fredrickson. Cultural Resources Publication